

III

An Old Corbridge Bath-house Revisited

M. C. Bishop

INTRODUCTION

THE first permanent Roman military occupation in the vicinity of Corbridge was at Beaufront Red House (Northumberland), constructed under Agricola (Hanson *et al.* 1979). Its successor (hereafter the "primary *castra*"), was built about 1 km to the east at the main Corbridge site, probably less than a decade later (Bishop and Dore 1989). This, with a reduction in size at some point, lasted into the early years of the 2nd century A.D. It was, in turn, replaced by a conventional cohort-sized base (the "secondary *castra*") that lasted until just after the middle of the 2nd century. All of these military establishments had one thing in common: their inhabitants would have required the provision of adequate bathing facilities.

Ever since it was discovered that the bath building at Beaufront Red House belonged not to the main site at Corbridge, but to the neighbouring Agricolan base (Hanson *et al.* 1979, 1-4), there has remained a need to identify a military bath-house that could have served the later *castra*. One likely candidate was excavated by Forster and Knowles as early as 1909, and was identified as Site 17 in their report (Forster and Knowles 1910, 233-42; OP 31-40). Site 17 certainly conformed to a number of characteristics of such military buildings, but seemed to lack conclusive dating evidence. A structure that may have been another bathing establishment is visible on aerial photographs (Soffe in Bishop & Dore 1989, 10-11), but obviously nothing is known of this beyond the mere fact of its existence. The purpose of this paper is to examine the case for accepting Site 17 not only as a military bath building, but also as one specifically

belonging to the secondary *castra* (Bishop & Dore 1989, 131-9). Acceptance of this hypothesis has some interesting implications.

PRIMARY EVIDENCE

Excavated in 1909, Site 17 was a *Reihentyp* bath-house (fig. 1), the basic rectangular building measuring 46 ft (14.02 m) by 18 ft (5.49 m), with walls 2 ft (0.61 m) thick (fig. 2).

In its first phase (fig. 3.1), the building was divided into three rooms, each 14 ft (4.27 m) wide, the easternmost (the *frigidarium*) being 9 ft 6 in (2.90 m) and the other two (the *tepidarium* in the centre and the *caldarium* to the west) 14 ft long. Two blocked doorways, presumably primary, were noted in the south wall, opening into the central and western rooms. The excavators suggested that the hypocausts may not have been primary, based upon the likely location of the sills of the doorways, which appeared to be below the level of the top of the *pilae*. Nevertheless, the original function of the building, as a bath-house, seems beyond question, given that the stoke-hole at the western end was evidently primary. The flue had been lined with roof-tiles used in the place of bricks; some intact, with the gaps between their flanges filled with cement, others with their flanges broken off.

In its second phase (fig. 3.2), the two apses, which butted against the north wall, were added in "fairly good masonry", and a short length of the original wall within the eastern apse was dismantled down to its foundation to permit access to a new cold plunge (fig. 4). This had a flagged floor finished with an *opus signinum* fillet at its junction with the walls of the apse and the main building. The bath was

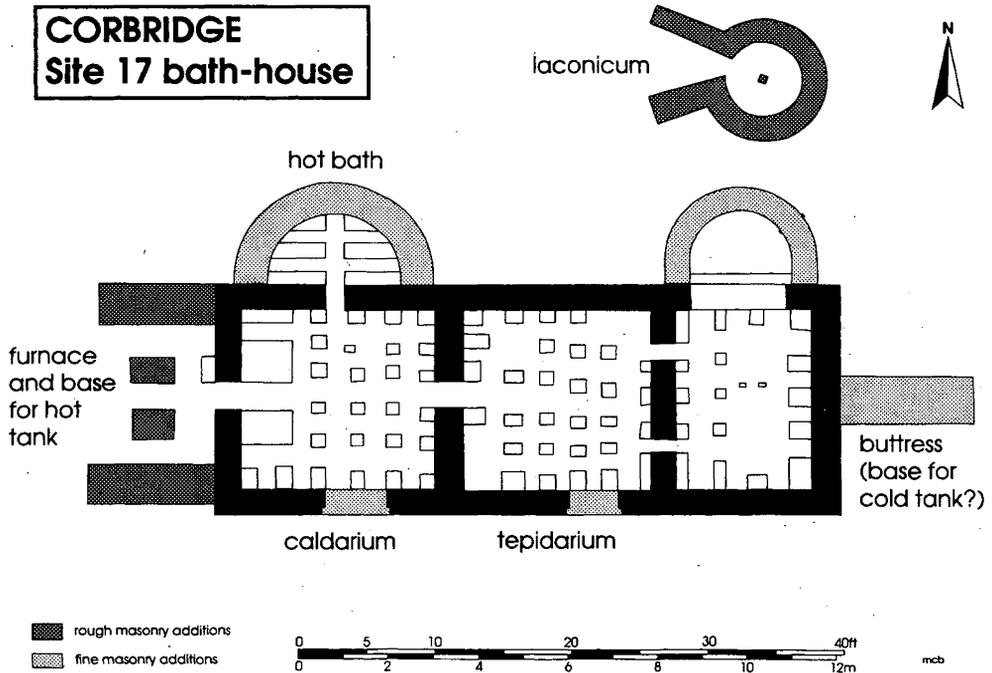


Fig. 1 Plan of the Site 17 bath-house at Corbridge, based on Forster & Knowles 1910, Fig. 8.

drained by a terracotta pipe leading out through the apse wall in a north-easterly direction. The eastern apse was 12 ft (3.66 m) wide and projected 8 ft (2.44 m) beyond the north wall. A hot plunge was added in the western apse, for which the north wall had to be pierced and the floor carried on dwarf walls. The hypocaust itself was mainly formed from stacked slabs of stone, although a few monolithic *pilae* of rather crudely shaped stone (fig. 4) had been used beneath the *frigidarium* (Bishop 1994, fig. 24), perhaps a late repair.

A further addition, in "solid masonry" (meaning, perhaps, with no rubble core) was a large rectangular butress at the east end of the building, measuring 9 ft (2.7 m) by 4 ft (1.2 m). Although the excavators observed that the ground sloped downwards at this end of the building and speculated that the butress may have been to prevent the end wall collapsing, it

is possible that this was in fact the base for a cold water tank feeding the cold bath.

Finally (fig. 3.3), at the western end of the building, the furnace area was enlarged with two extended wing walls and two central piers, all of "poor masonry", perhaps—as the excavators suggest—as a result of the greater amount of heat required to allow for the addition of the hot bath. The central supports probably carried the requisite hot tank to supply the bath. Thus phases 2 and 3 may be separate manifestations of the same programme of improvement and may actually have been contemporary.

However, one important aspect of the Site 17 baths appears to have been overlooked during the initial studies and all subsequent publications referring to it. Immediately to the north, a small circular stone-built structure (Forster and Knowles 1910, fig. 10), externally



Fig. 2 The bath building viewed from the west (photo courtesy of the Trustees of the Corbridge Excavation Fund).

9 ft 3 in (2.82 m) in diameter, is recognisable as a circular *laconicum* of a type noted at several military baths of the late first or early second centuries A.D., such as Hardknott (Fair 1927). The clue to its identity as such was found standing in the middle of it—a large iron beam, 3 ft 4 in (1.02 m) long, of a type found elsewhere in Romano-British baths (Wacher 1971), and evidently used as a floor support. So much attention was paid to the analysis of this bar (Louis in Forster & Knowles 1910, 265–8; OP 63–6) and the possibility that it had been smelted on the site, that its true significance was overlooked.

The *laconicum* was constructed of clay-bonded stone (a common military constructional technique), with walls 2 ft (0.61 m) thick, and showed signs of heavy burning in the mouth of the splayed wing walls that formed the stoke-hole. Within the structure, there were certainly signs of intense heat—the clay in the interstices had been baked red—but no direct traces of burning, the charcoal deposit being concentrated in “the very jaws of the opening”. In common with the furnace of the main bath building, that of the *laconicum* was positioned to take advantage of the prevailing westerly wind at Corbridge.

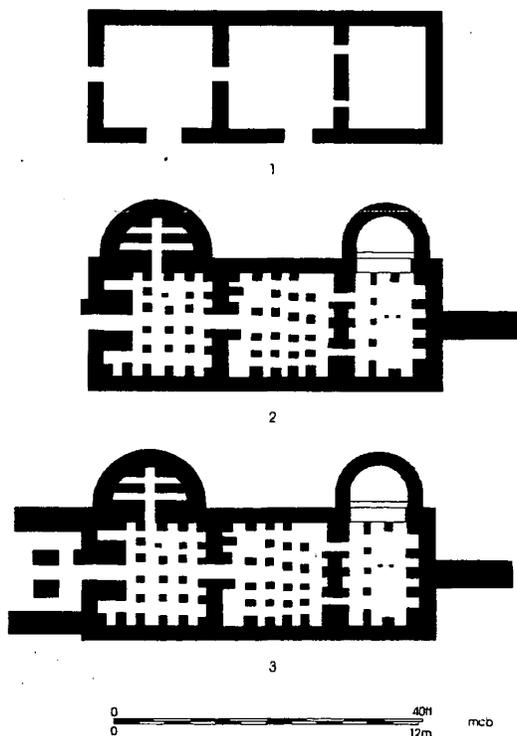


Fig. 3 The phases of the bath building.

SECONDARY EVIDENCE

A "large number of fragments" of what at the time were called "hand bricks" were recovered from within Site 17 (Knowles & Forster 1910, 238; OP 36). Made of terracotta, their shape was described as "more or less barrel-shaped, the barrel being slightly thickened at the lower end, with a roughly chamfered flange at each end and a flat, roughly circular surface at top and bottom; and each has a cylindrical hole pierced through its axis". The measurements of an average specimen were given as height $4\frac{1}{2}$ in (114 mm), upper surface diameter $3\text{--}3\frac{1}{4}$ in (76–83 mm), lower surface diameter $3\frac{1}{2}$ in (89 mm), barrel diameter $2\frac{1}{8}\text{--}2\frac{1}{2}$ in (54–64 mm), hole diameter $\frac{3}{8}\text{--}\frac{7}{8}$ in (19–22 mm). Only two

examples still exist within the collection of Corbridge museum (CO252; CO253; fig. 5) and they are readily identifiable as spacer bobbins used in cavity walling for bath-houses (Brodribb 1987, 67–9).

During excavations in the northern half of Room 2 of the south range of Site 11, a number of voussoirs ("about forty") were found (fig. 6), apparently in the process of being robbed and neatly stored prior to retrieval (Knowles & Forster 1909, 335–6; OP 31–2). They were all 18 in (457 mm) wide and 20–24 in (508–610 mm) long, and it was calculated that they came from arches with a radius in the region of 13 ft 6 in (4.1 m), a fact that was checked by means of an experimental reconstruction of 33 of the voussoirs (fig. 7). The variety of forms visible suggests that they derived from at least two arches. On each side, the stones had a roughly-worked fillet and hollow above the soffit (Knowles & Forster 1909, fig. 13, no. 21), whilst on the soffit itself and above the hollow, traces of a hard plaster were found.

These voussoirs are relevant to the present discussion because they are of a similar type to those used in the vaulting of the bath-house at Chesters and a number of other bath-houses, including Vindolanda and Great Chesters (MacDonald 1931, 278–84, figs 6–8). The Chesters examples were made of tufa and used in a form of rib-vaulting that employed flat bricks to fill the intervals between the ribs, at both the top and bottom, permitting the circulation of hot air within the vault. Each of the Chesters voussoirs had notches at both top and bottom, but the Corbridge examples have them only at the bottom, and in this they resemble those found at Great Chesters (MacDonald 1931, 283). The type of stone used at Corbridge was not recorded (the voussoirs are now missing), but sandstone and brick are known, as well as the tufa of the Chesters examples (Brodribb 1987, 47; MacDonald 1931, 282–3).

Although the excavators speculated that the voussoirs may have come from arches within Site 11 itself, they noted the discrepancy between the width of the voussoirs and the



Fig. 4 The cold plunge and hypocaust pilae (photo courtesy of the Trustees of the Corbridge Excavation Fund).

jambs of the building's doorways. A far better solution to their ultimate origin can be suggested, however. As we have already seen, Site 17 was 18 ft wide; since its walls were 2 ft thick, that left an internal width of 14 ft. If allowance is made for the cavity walling, then it will be seen that the voussoirs, with their deduced span of about 13 ft 6 in, could well have derived from this building.

One other intriguing detail concerning the voussoirs merits attention. In the photographs of the stones *in situ* (fig. 6), some of them are quite clearly marked with dots (probably

painted). In their text, the excavators noted that "several of the stones bore the masons' figures . . ., showing their position in the arch to which they belonged" (Knowles & Forster 1909, 336; OP 32), but Haverfield's report on the inscriptions from that campaign of excavation (*ibid.* 399; OP 95) shows that a series of Roman numerals were inscribed on seven of the blocks. Therefore, the dots on the voussoirs shown in the photographs were presumably added by the excavators to assist with their reconstruction, although they do not state this anywhere.

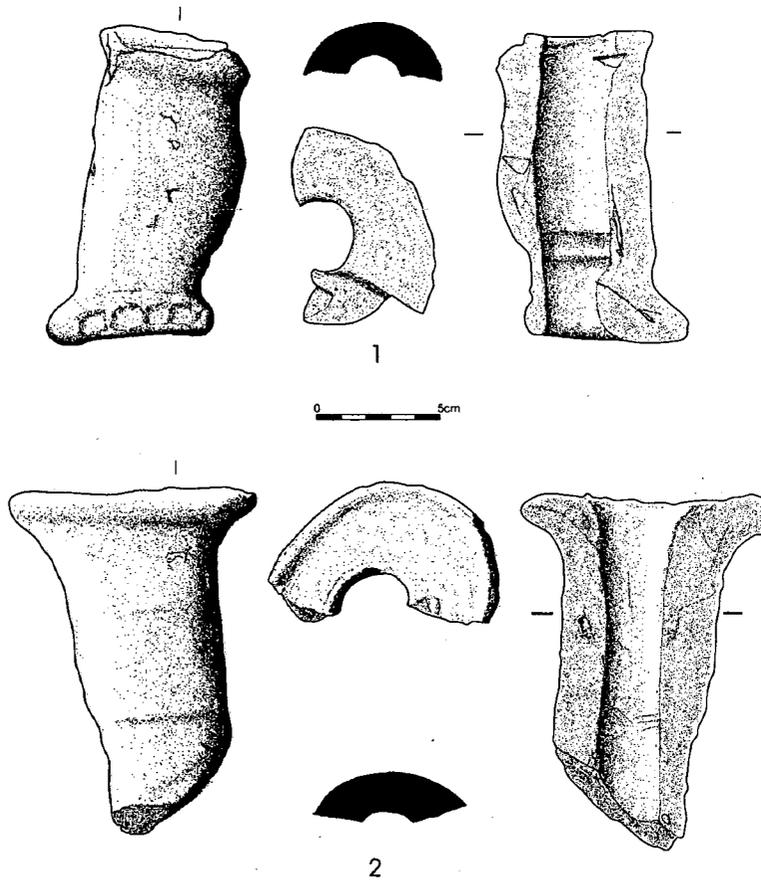


Fig. 5 The "hand-bricks" or spacer bobbins, 1: CO253; 2: CO252.

DISCUSSION

The course and dating of the Corbridge aqueduct is crucial to any discussion of the role of Site 17, particularly since the embankment excavated in 1909 can be seen to have made a careful detour around the bath building, whilst going straight across (and somewhat above) the remains of Site 14 (Forster & Knowles 1910, fig. 5). This is evidently the latest manifestation of the water channel, possibly dating to the 4th century (Forster & Knowles 1910,

220; OP 18), but the fountain and the section of aqueduct adjacent to it may have been constructed by *legio XX* in the middle of 2nd century (Bishop & Dore 1989, 139) or the beginning of the 3rd (Richmond & Gillam 1952, 162–3). The proximity of the bath-house to this line may indicate that it was located there for the sake of convenience, perhaps because the aqueduct course dates right back to the earliest days of the *castra* on the main site at Corbridge. That deviation of the aqueduct around Site 17 suggests that the bath-



Fig. 6 The voussoirs from Site 11 in situ, during excavation in 1908 (photo courtesy of the Trustees of the Corbridge Excavation Fund).

house remained in use after the *castra* had been abandoned and the legionary compounds constructed. Coins from the building were 3rd to 4th century in date (Forster & Knowles 1910, 238; OP 36) and that may also be thought to support continued post-*castra* use of the baths.

In all likelihood, if Site 17 is to be identified with the baths complex of the secondary *castra*, then it was almost certainly extramural, by comparison with similar structures belonging to cohort-sized bases (Johnson 1983, 220).

Intramural bathing establishments are not unknown, particularly amongst sites of the Antonine period, but in Britain these tend to be within *de novo* Antonine foundations such as various of the Antonine Wall forts (ibid. 193–4).

Given the deduced layout of the base (with its six retentural barrack blocks), there would be ample room for an *intervallum* road, rampart, and ditches between the northern limit of the known barrack buildings and Site 17 (in fact, a distance of about 45 m). The northern



Fig. 7 The voussoirs from Site 11 reconstructed to form an arch (photo courtesy of the Society of Antiquaries of Newcastle upon Tyne).

defences of the *castra* were suggested as having lain further to the north (Soffe in Bishop and Dore 1989, 9). In fact, the original excavators noted “marshy ground” to the west of Dere Street and north of the southern east-west street excavated in the 1913 campaign (Forster & Knowles 1914, 282; OP6), so a backfilled defensive ditch would not be implausible on this line. This newly suggested alignment for the defences of the secondary *castra* may also indicate, incidentally, that Site 14, the store building crossed by the aqueduct,

should perhaps be reconsidered as an internal, rampart-back building of that secondary *castra*, although it must be said it bears little resemblance to any of the more usual Roman military buildings. Nevertheless, unlike Site 17, Site 14 had evidently been demolished by the time that it was crossed by the aqueduct embankment (Forster & Knowles 1910, 219–20; OP 17–18).

Thus it would seem that the bath building known as Site 17 remains the most likely candidate for the baths of the secondary, cohort-

sized *castra*, given the range of military parallels that can be cited. The circular *laconicum* is indicative of a late-first or early-second-century date and this accords well with the postulated occupation of the secondary *castra* (C.A.D. 105–163: Bishop & Dore 1989, 140, table 12). The question of a bath-house for the larger, primary, military base remains unresolved, of course, unless it is that which aerial photographs show lies on the eastern continuation of the Stanegate.

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BIBLIOGRAPHY

Abbreviations

- AA³ *Archaeologia Aeliana, 3rd series*
 AA⁴ *Archaeologia Aeliana, 4th series*
 AA⁵ *Archaeologia Aeliana, 5th series*
 JRS *Journal of Roman studies*

Note: Three important excavation reports on Corstopitum, by R. H. Forster and W. H. Knowles, were published in *Archaeologia Aeliana* in 1909, 1910 and 1914 (see below). These were also produced as offprints from *Archaeologia Aeliana*. Annoyingly, the page numbers in the offprints differed from those in the original articles. For convenience, the offprint page numbers for these articles have been included in the references in the text, as well as the original page numbers, and are prefixed with the letters "OP".

- BISHOP, M. C. and DORE, J. N. (1989). *Corbridge: Excavations of the Roman Fort and Town, 1947–80*, HBMCE Archaeological Report No. 8, London
- BRODRIBB, G. (1987). *Roman Brick and Tile*, Gloucester
- FAIR, M. C. (1927). "Circular bath-buildings in connexion with cohort forts", *JRS*, 17, 220–4
- FORSTER, R. H. and KNOWLES, W. H. (1910). "Corstopitum. Report on the Excavations in 1909", AA³, 6, 205–72
- FORSTER, R. H. and KNOWLES, W. H. (1914). "Corstopitum. Report on the Excavations in 1913", AA³, 11, 279–310
- HANSON, W. S., DANIELS, C. M., DORE, J. N. and GILLAM, J. P. (1979). "The Agricolan supply base at Red House, Corbridge", AA⁵, 7, 1–88
- KNOWLES, W. H. and FORSTER, R. H. (1909). "Corstopitum. Report on the Excavations in 1908", AA³, 5, 305–424
- MACDONALD, G. (1931). "The bath-house at the fort of Chesters (Cilurnum)", AA⁴, 8, 219–304
- WACHER, J. S. (1971). "Roman iron beams", *Britannia*, 2, 200–2

